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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09 837,332	04 19 2001	Bart Gerard Boucherie	"40612-16"	8559

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EXAMINER

DEL SOLE, JOSEPH S

ART UNIT PAPER NUMBER

1722

DATE MAILED 02 25 2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/837,332

Applicant(s)

BOUCHERIE, BART GERARD

Examiner

Joseph S. Del Sole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (6,051,176).

Boucherie (6,051,176) teaches a tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession (col 1, lines 31-44 and col 2, lines 36-54), the tool comprising tool mold parts which can be moved relative to each other (Fig 4, #4 and #8 are the first part and Fig 4, #16 and #17 are the second mold part) and together comprise two groups of parallel mold cavities, and further comprise a rotatable carrier arm (Fig 6, #31) mounted for rotation about an axis, with one of the mold parts (Fig 4, #4 and #8) comprising a recess for each group of mold cavities, a mold insert (Fig 6, #16 and #17) being insertable into the recess; partial cavities being formed in the mold inserts, which partial cavities each correspond to a head portion of the toothbrush bodies (Fig 3); a first one of the plastics components being injected into a first one of the groups of mold cavities, and a second one of the plastics components being injected into a second one of the groups of mold cavities (Fig 1, #11 and #13); the mold cavities of the first and second groups are arranged on opposite sides of the rotatable carrier arm (Fig 13) and the mold inserts are attached to

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the carrier arm (Fig 1); the mold cavities are arranged in each group parallel to each other and so as to have an identical orientation (Fig 13); the mold cavities of the first group are arranged so as to lie opposite the mold cavities of the second group (Fig 13); the mold cavities of the first group are arranged with respect to the axis of the carrier arm so as to be exclusively point-symmetric to the mold cavities of the second group (Fig 13); each group is constituted by a pair of subgroups (Fig 13); in each pair of subgroups, the mold cavities of one subgroup are arranged so as to be aligned with the mold cavities of another subgroup (Fig 13); and wherein an imaginary front of the first group defined by the alignment of its mold cavities extends parallel but offset to a corresponding front of the second group, the axis of the carrier arm lying between the fronts (Fig 13).

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (EP 0 836 923 A1).

Boucherie (EP 0 836 923 A1) teaches a tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession (col 1, lines 27-41 and col 2, line 41 - col 3, line 2), the tool comprising tool mold parts which can be moved relative to each other (Fig 4, #4 and #8 are the first part and Fig 4, #16 and #17 are the second mold part) and together comprise two groups of parallel mold cavities, and further comprise a rotatable carrier arm (Fig 6, #31) mounted for rotation about an axis, with one of the mold parts (Fig 4, #4 and #8) comprising a recess for each group of mold cavities, a mold insert (Fig 6, #16 and #17) being insertable into the recess; partial cavities being formed in the mold inserts, which partial cavities each

correspond to a head portion of the toothbrush bodies (Fig 3); a first one of the plastics components being injected into a first one of the groups of mold cavities, and a second one of the plastics components being injected into a second one of the groups of mold cavities (Fig 1, #11 and #13); the mold cavities of the first and second groups are arranged on opposite sides of the rotatable carrier arm (Fig 13) and the mold inserts are attached to the carrier arm (Fig 1); the mold cavities are arranged in each group parallel to each other and so as to have an identical orientation (Fig 2 and Fig 13); the mold cavities of the first group are arranged so as to lie opposite the mold cavities of the second group (Fig 2 and Fig 13); the mold cavities of the first group are arranged with respect to the axis of the carrier arm so as to be exclusively point-symmetric to the mold cavities of the second group (Fig 2 and Fig 13); each group is constituted by a pair of subgroups (Fig 13); in each pair of subgroups, the mold cavities of one subgroup are arranged so as to be aligned with the mold cavities of another subgroup (Fig 13); and wherein an imaginary front of the first group defined by the alignment of its mold cavities extends parallel but offset to a corresponding front of the second group, the axis of the carrier arm lying between the fronts (Fig 13).

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (5,609,890).

Boucherie (5,609,890) teaches a tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession (col 1, lines 62-67 and col 2, lines 1-63), the tool comprising tool mold parts which can be moved relative to each other (Fig 6, #20 and #22 are the first part and Fig 6, #28c is the second

mold part) and together comprise two groups of parallel mold cavities, and further comprise a rotatable carrier arm (Fig 6, #16c) mounted for rotation about an axis, with one of the mold parts (Fig 6, #20 and #22) comprising a recess for each group of mold cavities, a mold insert (Fig 6, #28c) being insertable into the recess; partial cavities being formed in the mold inserts, which partial cavities each correspond to a head portion of the toothbrush bodies (Fig 6); a first one of the plastics components being injected into a first one of the groups of mold cavities, and a second one of the plastics components being injected into a second one of the groups of mold cavities (Fig 6); the mold cavities of the first and second groups are arranged on opposite sides of the rotatable carrier arm (Fig 6) and the mold inserts are attached to the carrier arm (Fig 6); the mold cavities are arranged in each group parallel to each other and so as to have an identical orientation (Fig 13); the mold cavities of the first group are arranged so as to lie opposite the mold cavities of the second group (Fig 13); the mold cavities of the first group are arranged with respect to the axis of the carrier arm so as to be exclusively point-symmetric to the mold cavities of the second group (Fig 13); each group is constituted by a pair of subgroups (Fig 13); in each pair of subgroups, the mold cavities of one subgroup are arranged so as to be aligned with the mold cavities of another subgroup (Fig 13); and wherein an imaginary front of the first group defined by the alignment of its mold cavities extends parallel but offset to a corresponding front of the second group, the axis of the carrier arm lying between the fronts (Fig 13).

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Boucherie (EP 0 678 368 A1).

Boucherie (EP 0 678 368 A1) teaches a tool for injection molding of toothbrush bodies of at least two different plastics components injection-molded in succession (col 2, lines 1-57), the tool comprising tool mold parts which can be moved relative to each other (Fig 6, #20 and #22 are the first part and Fig 6, #28c is the second mold part) and together comprise two groups of parallel mold cavities, and further comprise a rotatable carrier arm (Fig 6, #16c) mounted for rotation about an axis, with one of the mold parts (Fig 6, #20 and #22) comprising a recess for each group of mold cavities, a mold insert (Fig 6, #28c) being insertable into the recess; partial cavities being formed in the mold inserts, which partial cavities each correspond to a head portion of the toothbrush bodies (Fig 6); a first one of the plastics components being injected into a first one of the groups of mold cavities, and a second one of the plastics components being injected into a second one of the groups of mold cavities (Fig 6); the mold cavities of the first and second groups are arranged on opposite sides of the rotatable carrier arm (Fig 6) and the mold inserts are attached to the carrier arm (Fig 6); the mold cavities are arranged in each group parallel to each other and so as to have an identical orientation (Fig 13); the mold cavities of the first group are arranged so as to lie opposite the mold cavities of the second group (Fig 13); the mold cavities of the first group are arranged with respect to the axis of the carrier arm so as to be exclusively point-symmetric to the mold cavities of the second group (Fig 13); each group is constituted by a pair of subgroups (Fig 13); in each pair of subgroups, the mold cavities of one subgroup are arranged so as to be aligned with the mold cavities of another subgroup (Fig 13); and wherein an imaginary front of the first group defined by the alignment of its mold cavities extends parallel but

offset to a corresponding front of the second group, the axis of the carrier arm lying between the fronts (Fig 13).

Response to Arguments

6. Applicant's arguments filed 2/5/03 have been fully considered but they are not persuasive.

The Applicant argues that Boucherie ('039) does not teach that the mold cavities of the first group are arranged with respect to the axis A of the carrier arm so as to be exclusively point-symmetric to the mold cavities of the second group.

The Examiner has withdrawn the rejection drawn to Boucherie ('039), and while the Examiner still asserts that exclusive point symmetry is taught, the rejection has been withdrawn because the exclusive point symmetry is not with respect to the location at which the axis of the carrier arm is taught (in combination with the secondary references). Additionally, the Examiner fails to see how there is point symmetry between 18 and 12, 18 and 14 or between any two other groups.

The Applicant argues that neither Boucherie ('176) nor Boucherie ('923) teach the mold cavities of the first group arranged with respect to the axis of the carrier arm so as to be exclusively point symmetric.

The Examiner disagrees. Fig 13 shows two pairs of groups, arranged in four quadrants. The group in the upper right quadrant is exclusively point symmetric to the group in the lower left quadrant about the axis of rotation (#33). These two groups correspond to the groups defined by #s 23 and 24 of Fig 5 of each of (Boucherie '176) and (Boucherie '923) and therefore also teach all the limitations of claimed 1-4. The

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Examiner fails to see how these two groups are mirror symmetric. Furthermore, the Examiner does acknowledge that the groups in the upper left quadrant and the upper right quadrant are mirror symmetric, however this merely corresponds to the mirror symmetry between groups #16 and #18 of the Applicant's Figure 1. The relationship between such two groups is not the relationship claimed by the Applicant.

Furthermore, the group #20 in the upper right quadrant in Figure 6 of both Boucherie (5,609,890) and Boucherie (EP 0 678 368 A1) is exclusively point symmetric to the group #22 in the lower right quadrant of Figure 6 about the rotational axis of #16c and it is these two groups that exhibit all the limitations of Applicant's amended and new claims 1-4.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703) 308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non-after finals and (703) 872-9311 for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Joseph S. Del Sole

J.S.D.
February 14, 2003

[Signature]
ROBERT DAVIS
PRIMARY EXAMINER
GROUP 1800
2/21/03